

JOB PERFORMANCE MEASURE (JPM)

TASK CODE: CB0-019

TASK: Calibrate a Geiger-Mueller dose rate instrument

TRAINEE: _____

SSN: _____

REFERENCES:

- 1- WP12-HP1230, Dose Rate Instrumentation

TERMINAL OBJECTIVE: Given that a Geiger-Mueller dose rate instrument requires calibration, calibrate the instrument IAW WP12-HP1230

CONSEQUENCES OF INADEQUATE PERFORMANCE (ABNORMAL CONDITIONS):

- 1- Improper survey results

HAZARDS (PERSONNEL/EQUIPMENT SAFETY):

- 1- Electrical hazard

PRE-REQUISITE TRAINING / TASK COMPLETION:

- 1- CL 1.01 through CL 1.09, CL 1.13
- 2- CL 2.08, CL 2.16
- 3- CB0-030-JP, Operate the J.L. Shepherd Calibration Unit
- 3- CF0-116-JP, Operate a Geiger-Mueller dose rate instrument
- 4- CF0-156-JP, Control a radioactive source
- 5- ELC103, Electrical safety
- 6- MED101, First aid / CPR

TOOLS/EQUIPMENT (MATERIALS REQUIRED):

- | | |
|--|-----------------------------------|
| 1- Geiger-Mueller dose rate instrument | 6- High voltage probe |
| 2- Procedure WP12-HP1230 | 7- Positioning rig |
| 3- Calibration data sheet | 8- J.L. Shepherd Calibration Unit |
| 4- DVM | 9- Small screwdriver |
| 5- 5 and 10 uCi sources | |

Instructions to Trainee: You shall acquire the necessary references and equipment, and complete all required documentation. Knowledge requirements shall be completed with 80% or greater accuracy. Critical step performance shall be completed with 100% accuracy.

Instructions to Evaluator: The trainee is to perform the terminal objective, without assistance, on the job site. Provide clarification of requirements if requested by trainee. You are encouraged to ask relevant questions to verify trainee understanding. If a trainee fails this JPM, clearly document the reason for failure and forward to the trainee's manager. Successful completion of this JPM shall be recorded on the trainee's certification card.

KNOWLEDGE REQUIREMENTS:

Ref.	Knowledge requirement	P/F
1	State the frequency of calibration for a Geiger-Mueller instrument	
1	State your actions if the Geiger-Mueller instrument fails the calibration	

PERFORMANCE REQUIREMENTS:

Ref.	CRITICAL STEPS	P/F
1	Replace the instrument batteries, if required	
1	Perform an "as found" efficiency check	
1	Perform a linearity check	
1	Perform the overload response check	
1	Perform a detector assembly check	
1	Perform an "as left" reproducibility check	
1	Complete the calibration data sheet	

FINAL EVALUATION:

PASS

FAIL

COMMENTS:

EVALUATOR SIGNATURE:

DATE:

STUDENT SIGNATURE:

DATE:

MANAGER SIGNATURE: _____

DATE: _____